A2 cont'd

25. A process according to claim 1, wherein said zeolitic adsorbent in the separation section is a zeolite with structure type MWW.

26. A process according to claim 1, wherein said zeolitic adsorbent in the separation section is a NU-85 zeolite.

27. A process according to claim 1, wherein said zeolitic adsorbent in the separation section is a NU-86 zeolite.

28. A process according to claim 1, wherein said zeolitic adsorbent comprises a zeolite with a EUO, NES, or MWW structure, or an NU-85 or NU-86 zeolite, said zeolitic adsorbent being mixed with zeolite type LTA.

29. A process according to claim 1, comprising at least one hydroisomerisation section (2) and at least one adsorption separation section (4), in which the hydroisomerisation section (2) comprises at least one reactor, the separation section (4) comprises at least one unit and produces at least two fluxes, a first flux (8, 18) that is rich in dibranched and tribranched paraffins, optionally in naphthenes and aromatics, which is sent to the gasoline pool, and a second flux (7, 9) that is rich in linear and monobranched paraffins that is recycled to the inlet to the hydroisomerisation section (2).

30. A process according to claim 1, comprising at least two hydroisomerisation sections (2, 3) and at least one separation section (4), in which the separation section produces three fluxes, a first flux (8, 18, 28, 38) that is rich in dibranched and tribranched paraffins, optionally in naphthenes and aromatic compounds that is sent to the gasoline pool, a second flux (11, 16, 20, 24, 30, 36) that is rich in linear paraffins that is recycled to the inlet to the first hydroisomerisation section and at third flux (12, 21, 26, 34, 35, 39) that is rich in monobranched paraffins that is recycled to the inlet to the second hydroisomerisation section (3).

31. A process according to claim 30, wherein the whole of the effluent from the first hydroisomerisation (2) section traverses the second section (3).

A2 cont'd

32. A process according to claim 31, wherein the separation section (4) is located downstream of the hydroisomerisation sections (2, 3), the feed (1) is mixed with the recycle of paraffins (30) from the separation section (4), the resulting mixture (33) is sent to the first hydroisomerisation section (2), the effluent leaving the first hydroisomerisation section is mixed with the flux that is rich in monobranched paraffins (39) from the separation section (4), then the mixture is sent to the second hydroisomerisation section (3), and the effluent (37) from said latter section is sent to the separation section (4).

33. A process according to claim 31, wherein the separation section (4) is located upstream of hydroisomerisation sections (2, 3), the feed (1) is mixed with the flux (14) from the second hydroisomerisation section (3), then the resulting mixture (23) is sent to the separation section (4), the linear paraffin-rich effluent (11) is sent to the first hydroisomerisation section (2), the monobranched paraffin-rich flux (12) from the section (4) for separating an effluent (13) from the first hydroisomerisation section (2) is added, and the ensemble is sent to the second hydroisomerisation section (3).

34. A process according to claim 30, wherein the effluents from the hydroisomerisation sections are sent to at least one separation section.

35. A process according to claim 1, characterized in that at least one light fraction is separated by distillation upstream or downstream of the hydroisomerisation (2, 3) and/or separation (4, 5) sections.

36. A process according to claim 1, wherein the feed contains a C5 cut and at least one deisopentaniser and/or at least one depentaniser is/are located upstream or downstream of the hydroisomerisation (2, 3) and/or separation (4, 5) sections.

37. A process according to claim 1, wherein the feed contains a C6 cut but contains no C5 cut, and at least one deisohexaniser is disposed upstream or downstream of the hydroisomerisation (2, 3) and/or separation (4, 5) sections.